

SERVICE INSTRUCTION

Information about installation and maintenance of the fuel distribution block for ROTAX® 912 (Series) Aircraft Engines

ATA System: 73-10-00 Fuel system

1) Planning information

To obtain satisfactory results, procedures specified in this publication must be accomplished with accepted methods in accordance with prevailing legal regulations.

BRP-Rotax GmbH & Co KG cannot accept any responsibility for the quality of work performed in accomplishing the requirements of this publication.

1.1) Applicability

All versions of certified ROTAX® engine types:

Engine type (Series)	Serial number
912 A	all
912 F	all
912 S	all

All versions of ASTM compliant ROTAX® engine types:

Engine type (Series)	Serial number
912 UL	all
912 ULS	all

If they are equipped with the genuine ROTAX® fuel distribution block part no. 851328. In case of doubt, contact your aircraft manufacturer.

1.2) Concurrent ASB/SB/SI and SL

In addition to this Service Instruction the following documents must be observed:

- in general all relevant Alert Service Bulletins (ASB), Service Bulletins (SB), Service Instructions (SI), Service Letters (SL), Service Instruction - Parts and Accessories (SI-PAC) with relevance to perform this maintenance, repair or overhaul task.
- SB-912-079, "Essential information regarding engine installation, operation, and maintenance for ROTAX® 912 (Series) Aircraft Engines.", current version.

1.3) Reason

Field observations revealed a number of incorrect installations or maintenance of fuel pressure sensors attached to the genuine ROTAX® fuel distribution block part no. 851328.

1.3.1) Reason for the document Revision

- Chapter 2.2) removal of the part numbers for the fuel pressure sensor and connector as ROTAX does not provide GENUINE-ROTAX fuel system components for the applicable engine series (Chapter 1.1)
- Chapter 2.5) removal of part number
- Adaptation of Fig.1 and Fig.4
- Chapter 3.2.2) added NOTICE

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1.4) Subject

Information about installation and maintenance of the fuel distribution block for ROTAX® 912 (Series) Aircraft Engines.

1.5) Compliance

None - For Information Only



WARNING

Non-compliance with these instructions could result in engine damages, personal injuries or death.

These maintenance instructions shall be considered at any maintenance events, retrofitting, repair and overhaul.

1.6) Approval

For certified engines the technical content of this document is approved under the authority of the DOA ref. EASA.21J.048.

For ASTM compliant engines the technical content of this document is approved under the relevant processes of the effective BRP-Rotax quality management system.

Content concerning certified engine types also applies to ASTM compliant engine types.

1.7) Labor time

Estimated labor hours:

Engine installed in the aircraft - - - labor time will depend on airframe installation and therefore no estimate is available from the engine manufacturer.

1.8) Mass data

Change of weight - - - none

Moment of inertia - - - unaffected

1.9) Electrical load data

No change.

1.10) Software modifications

No change.

1.11) References

In addition to this technical information refer to current issue of

- in general Illustrated Parts Catalog (IPC) and in particular:
Chapter 73-10-00
- in general Operators Manual (OM)
- in general Installation Manual (IM) and in particular:
Chapter 73-00-00
- in general Maintenance Manual Line (MML) and in particular:
Chapter 05-20-00 and 12-20-00
- in general Maintenance Manual Heavy (MMH) and in particular: Chapter 73-10-00

NOTE: The status of the Manuals can be determined by checking the table of amendments. The 1st column of this table shows the revision status. Compare this number to the one listed on the ROTAX website: www.flyrotax.com. Updates and current revisions can be downloaded for free.

None.

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1.12) Other Publications affected

None.

1.13) Interchangeability of parts

Not affected

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2) Material Information

2.1) Material

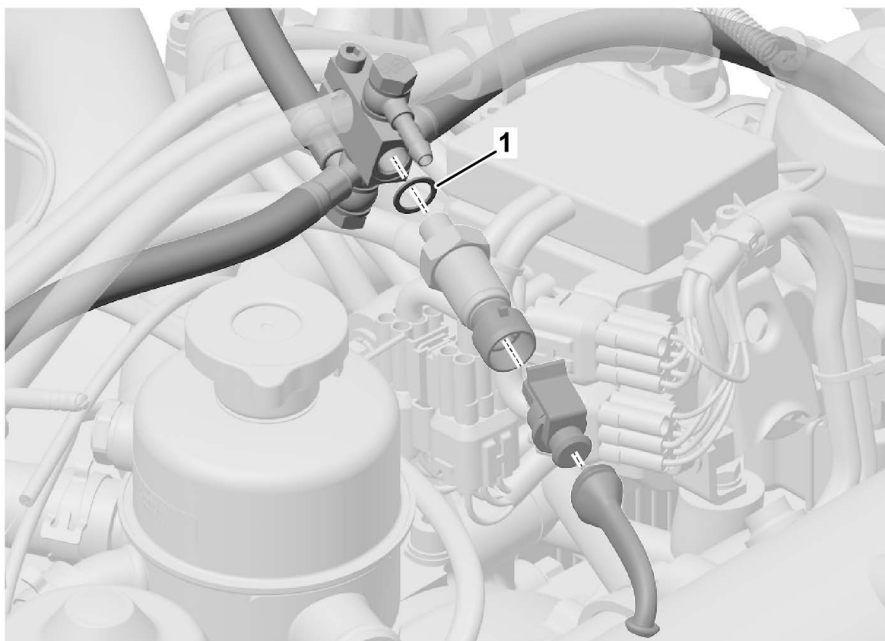
Price and availability will be provided on request by ROTAX® Authorized Distributors or their independent Service Centers.

2.2) Material requirement per engine

Parts requirement:

See Fig. 1

Fig.no.	Part no.	Qty / engine	Description	Application
1-1	230150*	(1)	SEALING RING A 10X14	Fuel distribution block
1-2	-	(1)	PRESSURE SENSOR M10X1	Fuel pressure
1-3	-	(1)	CONNECTOR SET	Fuel pressure
* or equivalent				



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Fig. 1
Fuel distribution block 912 (Series)

NOTICE

ROTAX® does not provide GENUINE-ROTAX® fuel pressure sensor and connector set for the fuel system but in case of installation of such equipment by the aircraft manufacturer, observe the manufacturers specifications.

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2.3) Material requirement per spare part

None.

2.4) Rework of parts

None.

2.5) Special tooling/lubricants- /adhesives- /sealing compounds

None.

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3) Accomplishment/Instructions

ROTAX® reserves the right to make any amendments to existing documents, which might become necessary due to this standardization, at the time of next revision or issue.

NOTE: Before maintenance, review the entire documentation to make sure you have a complete understanding of the procedure and requirements.

Accomplishment

All measures must be implemented and confirmed by at least one of the following persons or organizations:

- ROTAX® - Airworthiness representatives
- ROTAX® - Authorized Distributors or their independent Service Centers
- Persons approved by the respective Aviation Authorities
- Persons with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Heavy Maintenance) are entitled to carry out this work
- Persons with type-specific training

NOTE: Indicates supplementary information which may be needed to fully complete or understand an instruction.



All work has to be performed in accordance with the relevant ROTAX® Instructions for Continued Airworthiness (ICA) of the respective engine type.

General

Further material on general inspection, maintenance and repair can also be found in relevant Advisory Circular AC 43.13 from FAA.

Advisory Circular

The Advisory Circular (AC) contains maintenance methods, techniques and practices.

Procedure

3.1) Illustrated Parts Catalog - related information



See current Illustrated Parts Catalog (IPC) for the respective engine type, Chapter 73-10-00.

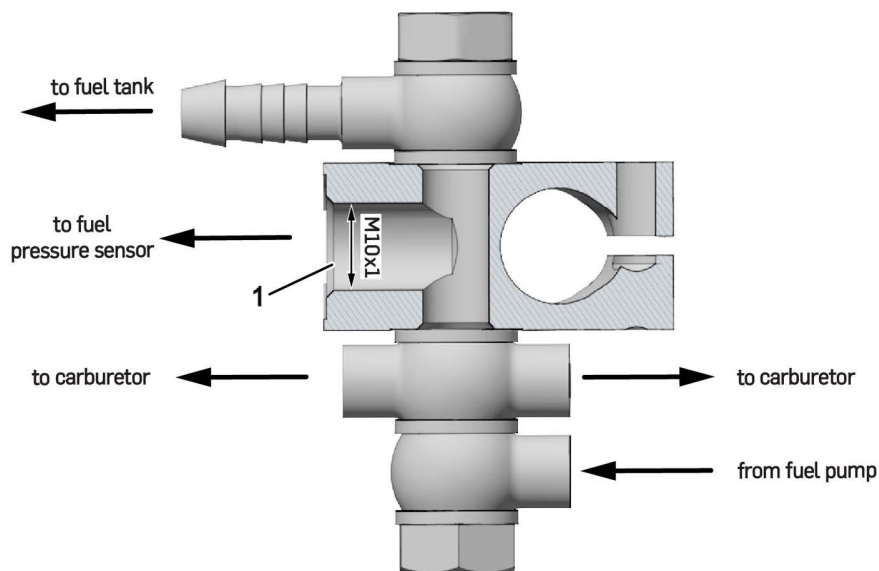
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3.2) Installation - related information

3.2.1) General

See Fig. 2

The genuine ROTAX® fuel distribution block part no. 851328 is provided with an M10X1 connection point (1) for optional fuel pressure sensor.



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Fig. 2

NOTICE

Do not use sensors with UNF or NPT threads. Metal chips generated by incompatible thread types may contaminate carburetors.

⚠ WARNING

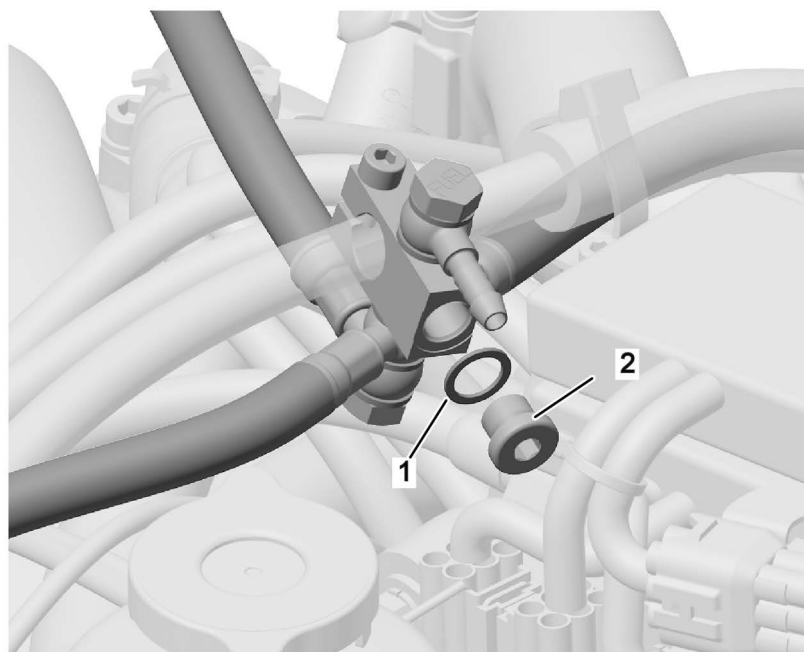
Non-compliance with these instructions could result in engine damages, personal injuries or death.

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3.2.2) Sensor Installation

See Fig. 3

Step	Procedure
1	Remove the plug screw (2) and sealing ring (1) from the fuel distribution block .
2	Clean any residual LOCTITE from the threads. NOTE: Prevent any residue from entering the distribution block.



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Fig. 3

NOTICE

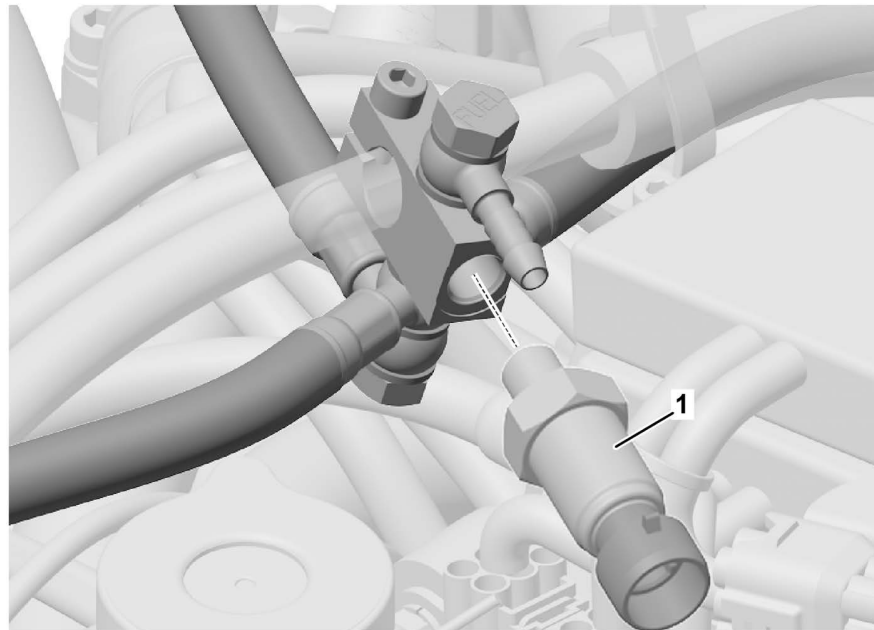
Residues of adhesives may lead to contamination and/or clogging of the fuel system.
Pay attention during maintenance of connections within the fuel system, especially where initially thread locking compound was applied (e.g. LOCTITE), in doubt flush the fuel system according to the instructions of the aircraft manufacturer.

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See Fig. 4

Step	Procedure
3	Install optional pressure sensor M10X1 (1). NOTE: Some pressure sensors are not equipped with a sealing ring, in such a case, use sealing ring 10x14 part no. 230150.



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Fig. 4

NOTICE

Usage of LOCTITE, thread lockers or sealants may not be appropriate in a fuel environment.

NOTICE

Do not use sensors with UNF or NPT threads. Metal chips generated by incompatible thread types may contaminate carburetors.

⚠ WARNING

Non-compliance with these instructions could result in engine damages, personal injuries or death.

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3.3) Operation - related information



See current Operator's Manual (OM) for the respective engine type.
See also Aircraft Flight Manual (AFM) / Pilot Operating Handbook (POH).

3.4) Maintenance (Line) - related information



See current Maintenance Manual Line (MML) for the respective engine type, Chapters 05-20-00 and 12-20-00.

Points of inspection	Interval Operating hours	Chapter Reference
	100 h	
Inspect the fuel system on the engine side for leakage and damages.	X	See current Maintenance Manual Line (MML) for the respective engine type and its periodical maintenance information.

3.5) Maintenance (Heavy) - related information



See current Maintenance Manual Heavy (MMH) for the respective engine type, Chapter 73-10-00

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3.6) Test run

Conduct test run.

In case of uninstalled engines test run is accomplished with the mandatory test run after installation into aircraft.



See current Maintenance Manual Line (MML) for the respective engine type, Chapter 12-20-00

Perform a leakage check of the entire fuel system, see current Maintenance Manual Line (MML) for the respective engine type.

3.7) Summary



A revision bar outside of the page margin indicates a change to text or graphic.

Translation into other languages might be performed in the course of language localization but does not lie within ROTAX® scope of responsibility.

In any case the original text in English language and the metric units are authoritative.

3.8) Inquiries

Inquiries regarding this Service Instruction should be sent to the ROTAX® Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors or their independent Service Centers is provided on <https://dealerlocator.flyrotax.com>.

NOTE:

The illustrations in this document show the typical construction. They may not represent full detail or the exact shape of the parts which have the same or similar function.

Exploded views are not technical drawings and are for reference only. For specific detail, refer to the current documents of the respective engine type.